

RAW SEQUENCE LISTING

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Application Serial Number: 10/815,340

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RAW SEQUENCE LISTING

DATE: 07/01/2005

PATENT APPLICATION: US/10/815,340

TIME: 14:40:51

Input Set : N:\Crf3\RULE60\10815340.raw.txt

Output Set: N:\CRF4\07012005\J815340.raw

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1 <110> APPLICANT: Berzofsky, Jay A.
2     Belyakov, Igor M.
3     Derby, Michael A.
4     Kelsall, Brian L.
5     Strober, Warren
6     THE GOVERNMENT OF THE UNITED STATES OF AMERICA, as
7 <120> TITLE OF INVENTION: MUCOSAL CYTOTOXIC T LYMPHOCYTE RESPONSES
8 <130> FILE REFERENCE: 368200PCSEQ
9 <140> CURRENT APPLICATION NUMBER: US/10/815,340
10 <141> CURRENT FILING DATE: 2004-03-30
11 <150> PRIOR APPLICATION NUMBER: US/09/508,552
12 <151> PRIOR FILING DATE: 2000-06-12
13 <150> PRIOR APPLICATION NUMBER: 60/058,523
14 <151> PRIOR FILING DATE: 1997-09-11
15 <150> PRIOR APPLICATION NUMBER: 60/074,894
16 <151> PRIOR FILING DATE: 1998-02-17
17 <160> NUMBER OF SEQ ID NOS: 20
18 <170> SOFTWARE: PatentIn Ver. 2.0
20 <210> SEQ ID NO: 1
21 <211> LENGTH: 35
22 <212> TYPE: PRT
23 <213> ORGANISM: Human immunodeficiency virus type 1
24 <400> SEQUENCE: 1
25     Glu Gln Met His Glu Asp Ile Ile Ser Leu Trp Asp Gln Ser Leu Lys
26         1             5             10             15
27     Pro Cys Val Lys Arg Ile Gln Arg Gly Pro Gly Arg Ala Phe Val Thr
28         20             25             30
29     Ile Gly Lys
30         35
32 <210> SEQ ID NO: 2
33 <211> LENGTH: 39
34 <212> TYPE: PRT
35 <213> ORGANISM: Human immunodeficiency virus type 1
36 <400> SEQUENCE: 2
37     Lys Gln Ile Ile Asn Met Trp Gln Glu Val Gly Lys Ala Met Tyr Ala
38         1             5             10             15
39     Pro Pro Ile Ser Gly Gln Ile Arg Arg Ile Gln Arg Gly Pro Gly Arg
40         20             25             30
41     Ala Phe Val Thr Ile Gly Lys
42         35
44 <210> SEQ ID NO: 3
45 <211> LENGTH: 39
46 <212> TYPE: PRT

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47 <213> ORGANISM: Human immunodeficiency virus type 1
48 <400> SEQUENCE: 3
49   Arg Asp Asn Trp Arg Ser Glu Leu Tyr Lys Tyr Lys Val Val Lys Ile
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51   Glu Pro Leu Gly Val Ala Pro Thr Arg Ile Gln Arg Gly Pro Gly Arg
52     20             25             30
53   Ala Phe Val Thr Ile Gly Lys
54     35
56 <210> SEQ ID NO: 4
57 <211> LENGTH: 48
58 <212> TYPE: PRT
59 <213> ORGANISM: Human immunodeficiency virus type 1
60 <400> SEQUENCE: 4
61   Ala Val Ala Glu Gly Thr Asp Arg Val Ile Glu Val Val Gln Gly Ala
62     1             5             10             15
63   Tyr Arg Ala Ile Arg His Ile Pro Arg Arg Ile Arg Gln Gly Leu Glu
64     20             25             30
65   Arg Arg Ile Gln Arg Gly Pro Gly Arg Ala Phe Val Thr Ile Gly Lys
66     35             40             45
68 <210> SEQ ID NO: 5
69 <211> LENGTH: 42
70 <212> TYPE: PRT
71 <213> ORGANISM: Human immunodeficiency virus type 1
72 <400> SEQUENCE: 5
73   Asp Arg Val Ile Glu Val Val Gln Gly Ala Tyr Arg Ala Ile Arg His
74     1             5             10             15
75   Ile Pro Arg Arg Ile Arg Gln Gly Leu Glu Arg Arg Ile Gln Arg Gly
76     20             25             30
77   Pro Gly Arg Ala Phe Val Thr Ile Gly Lys
78     35             40
80 <210> SEQ ID NO: 6
81 <211> LENGTH: 30
82 <212> TYPE: PRT
83 <213> ORGANISM: Human immunodeficiency virus type 1
84 <400> SEQUENCE: 6
85   Asp Arg Val Ile Glu Val Val Gln Gly Ala Tyr Arg Ala Ile Arg Arg
86     1             5             10             15
87   Ile Gln Arg Gly Pro Gly Arg Ala Phe Val Thr Ile Gly Lys
88     20             25             30
90 <210> SEQ ID NO: 7
91 <211> LENGTH: 32
92 <212> TYPE: PRT
93 <213> ORGANISM: Human immunodeficiency virus type 1
94 <400> SEQUENCE: 7
95   Ala Gln Gly Ala Tyr Arg Ala Ile Arg His Ile Pro Arg Arg Ile Arg
96     1             5             10             15
97   Arg Ile Gln Arg Gly Pro Gly Pro Arg Ala Phe Val Thr Ile Gly Lys
98     20             25             30
100 <210> SEQ ID NO: 8

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101 <211> LENGTH: 35
102 <212> TYPE: PRT
103 <213> ORGANISM: Human immunodeficiency virus type 1
104 <400> SEQUENCE: 8
105     Glu Gln Met His Glu Asp Ile Ile Ser Leu Trp Asp Gln Ser Leu Lys
106         1             5             10             15
107     Pro Cys Val Lys Arg Ile His Ile Gly Pro Gly Arg Ala Phe Tyr Thr
108             20             25             30
109     Thr Lys Asn
110             35
112 <210> SEQ ID NO: 9
113 <211> LENGTH: 39
114 <212> TYPE: PRT
115 <213> ORGANISM: Human immunodeficiency virus type 1
116 <400> SEQUENCE: 9
117     Lys Gln Ile Ile Asn Met Trp Gln Glu Val Gly Lys Ala Met Tyr Ala
118         1             5             10             15
119     Pro Pro Ile Ser Gly Gln Ile Arg Arg Ile His Ile Gly Pro Gly Arg
120             20             25             30
121     Ala Phe Tyr Thr Thr Lys Asn
122             35
124 <210> SEQ ID NO: 10
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126 <212> TYPE: PRT
127 <213> ORGANISM: Human immunodeficiency virus type 1
128 <400> SEQUENCE: 10
129     Arg Asp Asn Trp Arg Ser Glu Leu Tyr Lys Tyr Lys Val Val Lys Ile
130         1             5             10             15
131     Glu Pro Leu Gly Val Ala Pro Thr Arg Ile His Ile Gly Pro Gly Arg
132             20             25             30
133     Ala Phe Tyr Thr Thr Lys Asn
134             35
136 <210> SEQ ID NO: 11
137 <211> LENGTH: 48
138 <212> TYPE: PRT
139 <213> ORGANISM: Human immunodeficiency virus type 1
140 <400> SEQUENCE: 11
141     Ala Val Ala Glu Gly Thr Asp Arg Val Ile Glu Val Val Gln Gly Ala
142         1             5             10             15
143     Tyr Arg Ala Ile Arg His Ile Pro Arg Arg Ile Arg Gln Gly Leu Glu
144             20             25             30
145     Arg Arg Ile His Ile Gly Pro Gly Arg Ala Phe Tyr Thr Thr Lys Asn
146             35             40             45
148 <210> SEQ ID NO: 12
149 <211> LENGTH: 42
150 <212> TYPE: PRT
151 <213> ORGANISM: Human immunodeficiency virus type 1
152 <400> SEQUENCE: 12
153     Asp Arg Val Ile Glu Val Val Gln Gly Ala Tyr Arg Ala Ile Arg His

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154      1          5          10          15
155      Ile Pro Arg Arg Ile Arg Gln Gly Leu Glu Arg Arg Ile His Ile Gly
156              20          25          30
157      Pro Gly Arg Ala Phe Tyr Thr Thr Lys Asn
158              35          40
160 <210> SEQ ID NO: 13
161 <211> LENGTH: 30
162 <212> TYPE: PRT
163 <213> ORGANISM: Human immunodeficiency virus type 1
164 <400> SEQUENCE: 13
165      Asp Arg Val Ile Glu Val Val Gln Gly Ala Tyr Arg Ala Ile Arg Arg
166      1          5          10          15
167      Ile His Ile Gly Pro Gly Arg Ala Phe Tyr Thr Thr Lys Asn
168              20          25          30
170 <210> SEQ ID NO: 14
171 <211> LENGTH: 31
172 <212> TYPE: PRT
173 <213> ORGANISM: Human immunodeficiency virus type 1
174 <400> SEQUENCE: 14
175      Ala Gln Gly Ala Tyr Arg Ala Ile Arg His Ile Pro Arg Arg Ile Arg
176      1          5          10          15
177      Arg Ile His Ile Gly Pro Gly Arg Ala Phe Tyr Thr Thr Lys Asn
178              20          25          30
180 <210> SEQ ID NO: 15
181 <211> LENGTH: 15
182 <212> TYPE: PRT
183 <213> ORGANISM: Human immunodeficiency virus type 1
184 <400> SEQUENCE: 15
185      Arg Ile Gln Arg Gly Pro Gly Arg Ala Phe Val Thr Ile Gly Lys
186      1          5          10          15
188 <210> SEQ ID NO: 16
189 <211> LENGTH: 10
190 <212> TYPE: PRT
191 <213> ORGANISM: Human immunodeficiency virus type 1
192 <400> SEQUENCE: 16
193      Arg Gly Pro Gly Arg Ala Phe Val Thr Ile
194      1          5          10
196 <210> SEQ ID NO: 17
197 <211> LENGTH: 20
198 <212> TYPE: PRT
199 <213> ORGANISM: Human immunodeficiency virus type 1
200 <400> SEQUENCE: 17
201      Glu Gln Met His Glu Asp Ile Ile Ser Leu Trp Asp Gln Ser Leu Lys
202      1          5          10          15
203      Pro Cys Val Lys
204              20
206 <210> SEQ ID NO: 18
207 <211> LENGTH: 24
208 <212> TYPE: PRT

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209 <213> ORGANISM: Human immunodeficiency virus type 1
210 <400> SEQUENCE: 18
211     Lys Gln Ile Ile Asn Met Trp Gln Glu Val Gly Lys Ala Met Tyr Ala
212         1             5             10             15
213     Pro Pro Ile Ser Gly Gln Ile Arg
214             20
216 <210> SEQ ID NO: 19
217 <211> LENGTH: 24
218 <212> TYPE: PRT
219 <213> ORGANISM: Human immunodeficiency virus type 1
220 <400> SEQUENCE: 19
221     Arg Asp Asn Trp Arg Ser Glu Leu Tyr Lys Tyr Lys Val Val Lys Ile
222         1             5             10             15
223     Glu Pro Leu Gly Val Ala Pro Thr
224             20
226 <210> SEQ ID NO: 20
227 <211> LENGTH: 33
228 <212> TYPE: PRT
229 <213> ORGANISM: Human immunodeficiency virus type 1
230 <400> SEQUENCE: 20
231     Ala Val Ala Glu Gly Thr Asp Arg Val Ile Glu Val Val Gln Gly Ala
232         1             5             10             15
233     Tyr Arg Ala Ile Arg His Ile Pro Arg Arg Ile Arg Gln Gly Leu Glu
234             20             25             30
235     Arg

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VERIFICATION SUMMARY

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